

Work Order ID 164197

Friday, July 14, 2017 9:59:48 AM

164197*Ship Aug 1*

Page 1

Item ID: D3168-042

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Step Assembly, Low Short RH

Start Date: 7/19/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/1/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: JUL 14 2017 Tooling: _____ Date: _____
QC: 9-69 Date: _____ SPC (Y/N): _____ Date: _____

Run Start

NR1

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3168	B

110

0.00

110

Large Fab

Large Fab

Memo

0.17

Large Fab

1-Cut D2622-120C extrusion to 57.090" long as per Dwg D3168

2-Drill extrusion as per Dwg D3168 using Jig DT8680 for rivets. ****(Use only 1st 6holes)****

3-Deburr

-1

1x DC 2017-07-18

120

QC6- All purchased or subcontracted products

0.00

120

QC

Memo

0.00

Quality Control

*1 2017 6 1 700 DAS 24 9-89
JUL 20 2017*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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164197

Page 2

Item ID: D3168-042

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

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1

Cust Item ID:

Required Date: 8/1/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Weld per dwg A/R Aluminum rod Batch: _____	0.00							
130	Large Fab					<u>1</u>	<u>JUL 20 2017</u>		DAS 24 9-89
Large Fab	Memo	1.39							
Large Fab	1-Bevel end for welding FWD ONLY								
	2-Weld Support and end plate, as per QSI 004 & Dwg D3168 A/R Aluminum Rod <u>137078</u>								
	3- Grind end plate flush as per dwg								
140	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
140						<u>0</u>	<u>17.07.20</u>		DAS 9 9-89
QC	Memo	0.00							
Quality Control									
150	QC5- Inspect part completeness to step on W/O	0.00							
150						<u>0</u>	<u>17.07.20</u>		DAS 9 9-89
QC	Memo	0.02							
Quality Control									

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
7105 " S 100				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER : ☐																					

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Page 3

Item ID: D3168-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step Assembly, Low Short RH
Start Date: 7/19/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/1/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Chemical Conversion Coat per QSI005 4.1	0.00							
160									
HandFinish	Memo	0.33							
Hand Finishing									20170724 BEB.
170	QC7-Inspect Chemical Conversion Coat	0.00							
170									
QC	Memo	0.00							
Quality Control									JUL 26 2017 DAS 24 9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
TOB 0 x 30				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Page 4

Item ID: D3168-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Step Assembly, Low Short RH
 Start Date: 7/19/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 8/1/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* Large Fab Large Fab	Weld per dwg A/R Aluminum rod Batch: _____ Large Fab Memo Rivet Leg Assembly as per Dwg D3168 1-Bevel end for welding 2-Inspect for foreign object as per QSI 024 3-Weld end plate as per QSI 004 & Dwg D3168 A/R Aluminum Rod 137078 4- Grind end plate flush as per dwg	0.00 0.54				1		JUL 26 2017	DAS 24 9-89
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				1			DAS 38 9-89 JUL 26 2017

1x DG 2017-07-25

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
7105 6 S 101					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 164197

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Page 5

Item ID: D3168-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step Assembly, Low Short RH
Start Date: 7/19/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/1/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Touch up alodine	0.00							
200									
HandFinish	Memo	0.35							
Hand Finishing									
210	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
210									
Powdercoat	Memo	0.49							
Powder Coating	START TIME: 10:15. OVEN TEMPERATURE: 300° FINISH TIME: 10:45.								
220	Wing Walk as per dwg QSI005 4.4 Batch 1113794200								
220									
HandFinish	Memo	0.96							
Hand Finishing									

(X1 RH) 20170727
BEB.

1 17-07-27

1 RH 12/05/20

DQA: _____ Date: _____



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Large Fab ☐	Composite ☐	Supplier ☐																			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval																	
Description Work Order Deviation		Disposition																			
				Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
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OTHER : _____																					

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Revision ID: Stop ***NS2***
Item Name: Step Assembly, Low Short RH
Start Date: 7/19/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/1/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	QC3- Inspect Part Finish	0.00							
230									DAS 38
QC	Memo	0.00				/			JUL 31 2017
Quality Control									
290	Identify as per dwg & Stock Location	0.00							
290	Packaging								
Packaging	Memo	0.00							JUL 31 2017
Packaging									
300	QC21- Final Inspection - Work Order Release	0.00							
300									
QC	Memo	0.10							17/8/2
Quality Control									

DAS
21
9-89 JUL 31 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, July 14, 2017 9:59:52 AM

Page 1

Work Order ID: 164197

164197

Parent Item: D3168-042

D3168-042

Parent Item Name: Step Assembly, Low Short RH

Start Date: 7/19/2017

Required Date: 8/1/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.03.15 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3067-1

Manufactured No

180

Each

153.0000

1

1

D3067-1

End Plate

**

DC 2017-07-25

Location

Loc Qty

Loc Code

WA003

153

B160540 →

1

159903

10

160540

103

163742

40

D2622-120C

Manufactured No

130

Each

46.0000

0.5

0.5

D2622-120C

Step Extrusion

**

DC 2017-07-18

Location

Loc Qty

Loc Code

WA003

46

B157441 →

.5

152316

17.5

157441

28.5

D3067-1

Manufactured No

130

Each

153.0000

1

1

D3067-1

End Plate

**

DC 2017-07-18

Location

Loc Qty

Loc Code

WA003

153

B160540 →

1

159903

10

160540

103

163742

40

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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		OTHER : ☐																							

Picklist Print

Friday, July 14, 2017 9:59:52 AM

Page 2

Work Order ID: 164197

164197

Parent Item: D3168-042

D3168-042

Parent Item Name: Step Assembly, Low Short RH

Start Date: 7/19/2017

Required Date: 8/1/2017

Start Qty: 1.00

Required Qty: 1.00

✓ D3077-1

Manufactured No

180 Each 4.0000 2 2

D3077-1

Step Leg

**

DC 2017-07-25

Location

Loc Qty

Loc Code

WA003

4 B164323 → 2

151275

4

✓ D3170-1

Manufactured No

180 Each 12.0000 2 2

D3170-1

Spacer

**

DC 2017-07-25

Location

Loc Qty

Loc Code

PKG

10 B163605 → 2

163605

10

WA003

2

120606

2

✓ D3219-5

Manufactured No

180 Each 27.0000 2 2

D3219-5

Plate

**

DC 2017-07-18

Location

Loc Qty

Loc Code

WA003

27 B146687 → 12

146687

27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
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OTHER : ☐					

Picklist Print

Friday, July 14, 2017 9:59:52 AM

Page 3

Work Order ID: 164197

164197

Parent Item: D3168-042

D3168-042

Parent Item Name: Step Assembly, Low Short RH

Start Date: 7/19/2017

Required Date: 8/1/2017

Start Qty: 1.00

Required Qty: 1.00

√ MS20600-AD4W4 Purchased No
MS20600-AD4W4
Rivet

**

DL 2017-07-25

Location

Loc Qty

Loc Code

CCK004

511

B137587 → 12

M135704

11

M137820

500

ST308

273

M137587

273

WA003

375

M135442

204

M136986

108

M137412

63

Friday, July 14, 2017 9:59:52 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



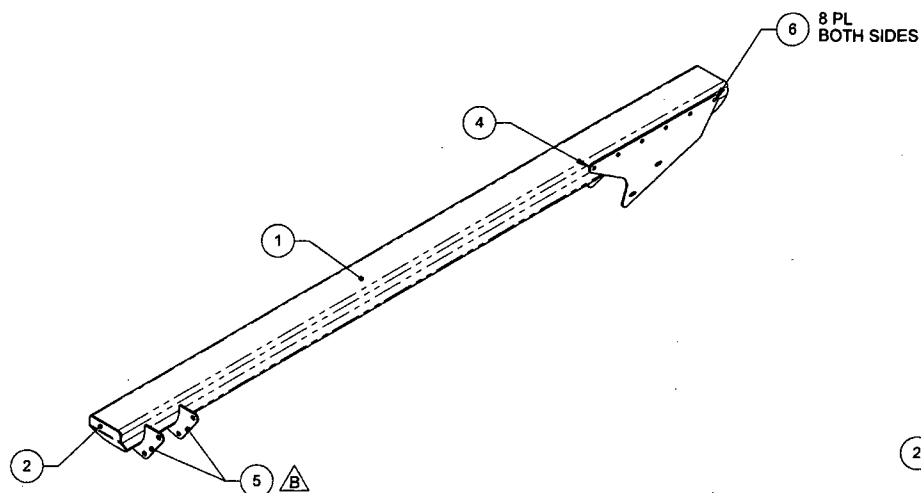
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Work Order update only ☐

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ITEM	QTY -041	P/N	DESCRIPTION
	X	D3168-041	STEP ASSEMBLY, LOW SHORT (LH)
1	1	D2622-058	STEP EXTRUSION
2	2	D3067-1	END PLATE
3	2	D3077-1	STEP LEG
4	2	D3170-1	SPACER
5	2	D3219-5	PLATE
6	12	MS20600AD4W4	RIVET, BLIND



D3168-041 STEP ASSEMBLY, LOW SHORT (LH)

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044
- 7) WEIGHT: 5.03 lbs
- 8) WELD PER DART QSI 004
- 9) APPLY BLACK ANTI-SKID PAINT ON THE TOP SURFACE TO THE BOTTOM OF THE TOP RADII AS SHOWN PER DART QSI 005 4.4

RELEASED
2016-03-14
EN 16-656

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 164197 MJS
1170714

B	REDRAWN AND REFORMATED. ITEM 5 WAS D3169-1 QTY WAS 1. SEE CIR 15-44. PART NUMBER FOR ITEM 1 WAS D2622-00.	AJS	15.11.10
A	NEW ISSUE	CP	02.09.11
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	ML	DRAWING NO.	REV. B
MFG. APPR.	JLM	D3168	SHEET 1 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STEP ASSEMBLY, LOW SHORT	NTS
DATE	15.11.10	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED

DQA: _____ Date: _____

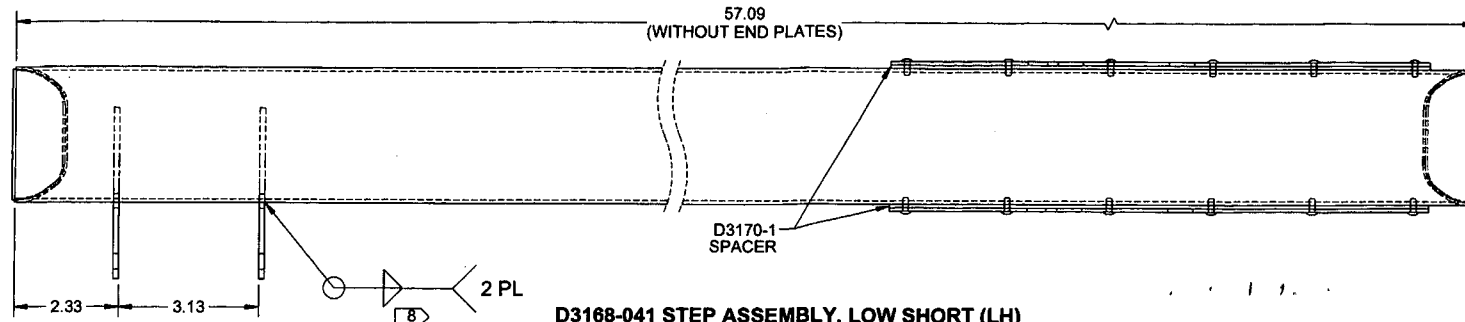


WORK ORDER NON-CONFORMANCE / UPDATE

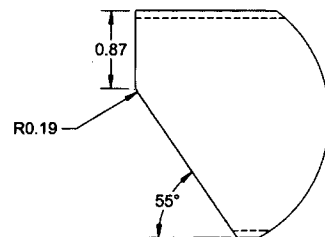
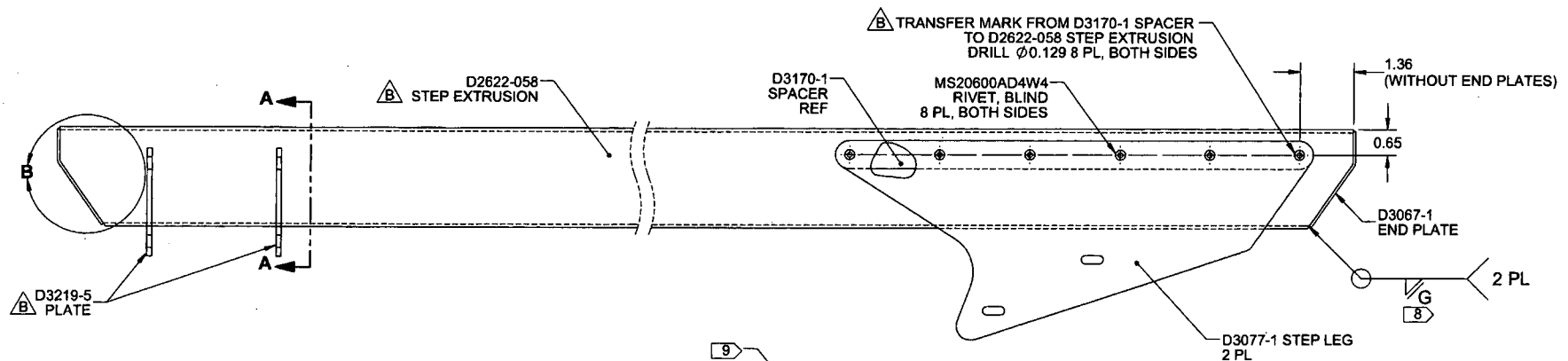
QA Closed: _____ Date: _____

Work Order update only ☐

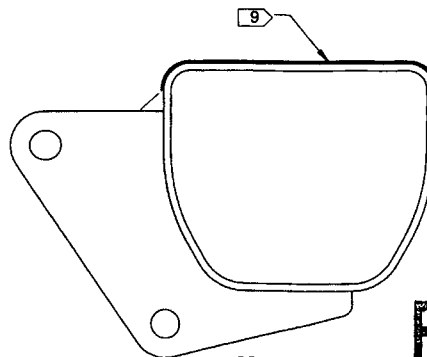
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Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							



D3168-041 STEP ASSEMBLY, LOW SHORT (LH)



DETAIL B
2 PL, SCALE 2X
D3067-1 END PLATE NOT SHOWN



SECTION A-A

RELEASED
2016-03-14

APPROVED

DESIGN DRAWN	CP AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	DRAWING NO. D3168	REV. B
MFG. APPR.	JLM	SHEET 2 OF 4	
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STEP ASSEMBLY, LOW SHORT	NTS
DATE	15.11.10	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

DQA: _____ Date: _____



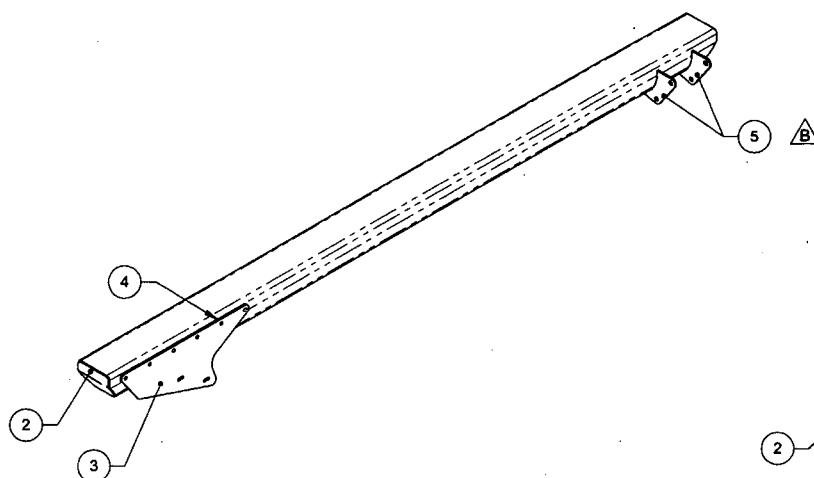
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐									
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval					
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY											
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER :											

ITEM	QTY -042	P/N	DESCRIPTION
	X	D3168-042	STEP ASSEMBLY, LOW SHORT (RH)
1	1	D2622-058	STEP EXTRUSION
2	2	D3067-1	END PLATE
3	2	D3077-1	STEP LEG
4	2	D3170-1	SPACER
5	2	D3219-5	PLATE
6	12	MS20600AD4W4	RIVET, BLIND



D3168-042 STEP ASSEMBLY, LOW SHORT (RH)

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044
- 7) WEIGHT: 5.03 lbs
- 8) WELD PER DART QSI 004
- 9) APPLY BLACK ANTI-SKID PAINT ON THE TOP SURFACE TO THE BOTTOM OF THE TOP RADII AS SHOWN PER DART QSI 005 4.4

RELEASED
2016-03-14

APPROVED

DESIGN	CP
DRAWN	AJS
CHECKED	ML
MFG. APPR.	JLM
APPROVED	WM
DE APPR.	DS
DATE	15.11.10

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3168	REV. B
TITLE STEP ASSEMBLY, LOW SHORT	SCALE NTS
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SHEET 3 OF 4

DQA: _____ Date: _____

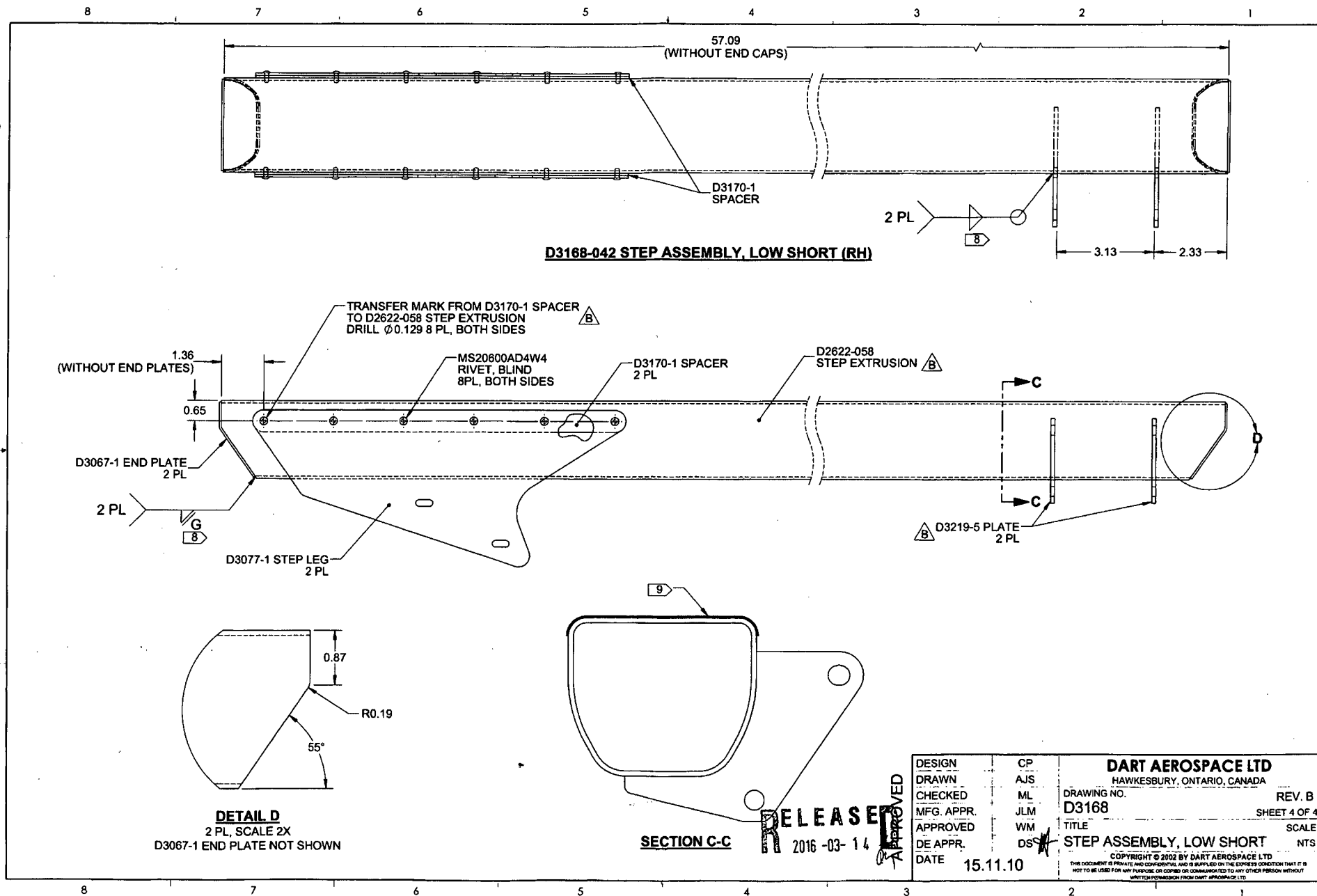


WORK ORDER NON-CONFORMANCE / UPDATE

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